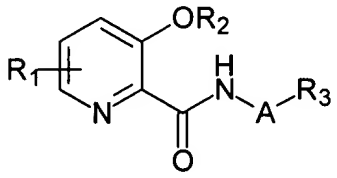
Amendments to the Claims

Claim 1 (Currently amended) A picolinamide compound represented by formula (1) or a salt thereof:



(1)

wherein

A represents a bond or an optionally substituted alkylene chain;

R_1 represents one or more groups, which may be the same or different, selected from the group consisting of a hydrogen atom, alkoxy, and haloalkoxy;

R_2 represents a hydrogen atom, benzyl, alkyl or alkanoyl, in which the groups other than the hydrogen atom may be substituted; and

R_3 represents a hydrogen atom, cycloalkyl, cycloalkenyl, aryl or a heterocyclic group selected from the group consisting of furyl, benzofuranyl, pyrrolyl, indolyl, thienyl, benzothienyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, pyridyl, quinolinyl, pyrimidinyl, pyridazinyl, pyrazinyl, oxiranyl, tetrahydrofuryl, perhydropyranyl, pyrrolidinyl, piperidnyl, homopiperidinyl and morpholinyl, in which the groups other than the hydrogen atom may be substituted,

excluding the case where R_1 represents a hydrogen atom, A represents a bond or a methylene chain, and R_3 represents phenyl or cyclohexyl, ~~and~~ the case where R_1 represents a hydrogen atom, A represents a bond or an alkylene chain and R_3 represents a hydrogen atom, and the case where R_1 represents a hydrogen atom, A represents a bond, and R_3 represents adamantyl and phenylalkyl.

Claim 2 (Previously presented) The picolinamide compound or salt thereof according to claim 1, wherein

alkylene chain represented by A is an alkylene chain having 1 to 12 carbon atoms;

alkoxy or haloalkoxy represented by R_1 is alkoxy having 1 to 4 carbon atoms or haloalkoxy having 1 to 4 carbon atoms;

alkyl or alkanoyl represented by R_2 is alkyl having 1 to 4 carbon atoms or alkanoyl having 1 to 4 carbon atoms;

cycloalkyl, cycloalkenyl, aryl, and heterocyclic group represented by R_3 are respectively cycloalkyl having 3 to 12 carbon atoms, cycloalkenyl having 3 to 12 carbon atoms, monocyclic or polycyclic 3- to 12-membered aryl or 3- to 12-membered heterocyclic group.

Claim 3 (Previously presented) The picolinamide compound or salt thereof according to claim 1 or 2, wherein A is selected from the group consisting of a bond, methylene chain, 1,1- or 1,2-ethylene chain, 1,1-, 1,2-, 1,3-, or 2,2-propylene chain, 2-methyl-1,3-propylene chain, 1,1-, 1,2-, 1,3-, 1,4-, 2,2-, 2,3-, or 2,4-butylene chain, 3,3-dimethyl-1,4-butylene chain, 1,1,3,3-tetramethyl-1,4-butylene chain, hexamethylene chain, heptamethylene chain, octamethylene chain, nonamethylene chain, decamethylene chain, undecamethylene chain, dodecamethylene chain, 1,5-pentyl chain and 2,5-dichloro-1,5-pentyl chain.

Claim 4 (Currently amended) The picolinamide compound or salt thereof according to claim 1, wherein alkoxy ~~or haloalkoxy~~ represented by R_1 is methoxy, ethoxy, 1-propyloxy, isopropyloxy, 1-butyloxy, 2-butyloxy, t-butyloxy, and haloalkoxy represented by R_1 is trifluoromethoxy, difluoromethoxy, fluoromethoxy, difluorochloromethoxy or trifluoroethoxy.

Claim 5 (Previously presented) The picolinamide compound or salt thereof according to claim 1, wherein R_1 represents a hydrogen atom, 4-methoxy, 6-methoxy, 4,5-dimethoxy, or 4,6-dimethoxy.

Claim 6 (Previously presented) The picolinamide compound or salt thereof according to claim 1, wherein

the substituted benzyl represented by R_2 is p-nitrobenzyl or p-methoxybenzyl,

the substituted alkyl represented by R_2 is methoxymethyl or methoxyethoxymethyl and

alkanoyl represented by R_2 is isobutyryl, acetyl, propionyl, or pivaloyl.

Claim 7 (Previously presented) The picolinamide compound or salt thereof according to claim 1, wherein R_2 represents a hydrogen atom, benzyl, acetyl or propionyl.

Claim 8 (Previously presented) The picolinamide compound or salt thereof according to claim 1, wherein cycloalkyl or cycloalkenyl represented by R_3 is cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, cyclooctyl, cyclononyl, cyclodecyl, cycloundecyl, cyclododecyl, cyclohexenyl, tetrahydronaphthyl, decahydronaphthyl, cyclododeca-trienyl, indanyl,norbornyl, or adamantyl.

Claim 9 (Previously presented) The picolinamide compound or salt thereof according to claim 1, wherein, when cycloalkyl or cycloalkenyl represented by R_3 is substituted by a substituent, the substituent is one, two or more groups selected from the group consisting of a halogen atom, cyano, nitro, amino, carboxyl, hydroxyl, phenyl which may be substituted by one, two or more substituents selected from the group consisting of a halogen atom, cyano, nitro, amino, alkylamino, alkanoylamino, alkyl having 1 to 5 carbon atoms, haloalkyl having 1 to 4 carbon atoms, alkoxy having 1 to 4 carbon atoms, and haloalkoxy having 1 to 4 carbon atoms, alkyl having 1 to 5 carbon atoms, haloalkyl having 1 to 4 carbon atoms and haloalkoxy having 1 to 4 carbon atoms.

Claim 10 (Previously presented) The picolinamide compound or salt thereof according to claim 1, wherein aryl represented by R_3 is phenyl, or naphthyl.

Claim 11 (Previously presented) The picolinamide compound or salt thereof according to claim 1, wherein when aryl or heterocyclic group represented by R_3 is substituted by a substituent, the substituent is one or two or more groups selected from the group consisting of:

a halogen atom, cyano, nitro, amino, hydroxyl, formyl, carboxyl, carbamoyl or thiocarbamoyl;

alkyl, alkoxy, alkylthio, alkylsulfinyl, or alkylsulfonyl, wherein said groups are straight-chain or branched groups having 1 to 6 carbon atoms;

straight-chain or branched C_2-C_6 alkenyl or straight-chain or branched C_2-C_6 alkenyloxy;

haloalkyl, haloalkoxy, haloalkylthio, haloalkylsulfinyl or haloalkylsulfonyl, wherein said groups are straight-chain or branched groups having 1 to 6 carbon atoms that each have 1 to 13 halogen atoms which may be the same or different;

straight-chain or branched C_2-C_6 haloalkenyloxy or straight-chain or branched C_2-C_6 haloalkenyloxy, wherein said groups each have 1 to 11 halogen atoms which may be the same or different;

acylamino, N-acyl-N-alkylamino, alkylamino, dialkylamino, alkylcarbonyl, alkylcarbonyloxy, alkoxycarbonyl, alkylsulfonyloxy, hydroxyiminoalkyl, or alkoxyiminoalkyl, wherein said groups each have straight-chain or branched alkyl having 1 to 6 carbon atoms;

alkylene, dioxyalkylene or polyoxaalkylene, wherein said groups may be substituted by one, two or more substituents selected from the group consisting of a halogen atom, straight-chain or branched alkyl having 1 to 4 carbon atoms, straight-chain or branched haloalkyl having 1 to 5 carbon atoms, which has 1 to 11 halogen atoms which may be the same or different, and are present as a chain which is substituted in its both ends at adjacent positions on the ring to form a ring; and

cycloalkyl having 3 to 6 carbon atoms, aryl, aryloxy, arylthio, arylsulfinyl, arylsulfonyl, arylamino, arylalkyl, arylalkyloxy, aryloxyalkyloxy, arylthioalkyloxy, aryloxyalkylthio, arylthioalkylthio, arylalkylthio, aryloxyalkyl, arylthioalkyl, heterocyclic group, heterocyclic oxy, heterocyclic thio, heterocyclic alkyl, heterocyclic alkyloxy or heterocyclic alkylthio, wherein alkyl is straight-chain or branched alkyl having 1 to 5 carbon atoms.

Claim 12 (Previously presented) The picolinamide compound or salt thereof according to claim 11, wherein when cycloalkyl having 3 to 6 carbon atoms, aryl, aryloxy, arylthio, arylsulfinyl, arylsulfonyl, arylamino, arylalkyl, arylalkyloxy, aryloxyalkyloxy, arylthioalkyloxy, aryloxyalkylthio, arylthioalkylthio, arylalkylthio, aryloxyalkyl, arylthioalkyl, heterocyclic group, heterocyclic oxy, heterocyclic thio, heterocyclic alkyl, heterocyclic alkyloxy or heterocyclic alkylthio, which is a substituent of aryl or heterocyclic group represented by R_3 is substituted by an additional substituent, the additional substituent is one, two or more groups selected from the group consisting of:

a halogen atom, cyano, nitro, amino, hydroxyl, formyl, carboxyl, carbamoyl or thiocarbamoyl;

alkyl, alkoxy, alkylthio, alkylsulfinyl or alkylsulfonyl, wherein said groups are straight-chain or branched groups having 1 to 6 carbon atoms;

straight-chain or branched C_2-C_6 alkenyl or straight-chain or branched C_2-C_6 alkenyloxy;

haloalkyl, haloalkoxy, haloalkylthio, haloalkylsulfinyl or haloalkylsulfonyl, wherein said groups are straight-chain or branched groups having 1 to 6 carbon atoms that each have 1 to 13 halogen atoms which may be the same or different;

straight-chain or branched C_2-C_6 haloalkenyl or straight-chain or branched C_2-C_6 haloalkenyloxy, wherein said groups each have 1 to 11 halogen atoms which may be the same or different;

acylamino, N-acyl-N-alkylamino, alkylamino, dialkylamino, alkylcarbonyl, alkylcarbonyloxy, alkoxycarbonyl, alkylsulfonyloxy, hydroxyiminoalkyl or alkoxyiminoalkyl, wherein said groups each have straight-chain or branched alkyl having 1 to 6 carbon atoms;

alkylene, dioxyalkylene or polyoxaalkylene, wherein said groups may be substituted by one, two or more substituents selected from the group consisting of a halogen atom, straight-chain or branched alkyl having 1 to 4 carbon atoms, straight-chain or branched haloalkyl having 1 to 5 carbon atoms, which has 1 to 11 halogen atoms which may be the same or different, and are present as a chain which is substituted in its both ends at adjacent positions on the ring to form a ring; and

cycloalkyl having 3 to 6 carbon atoms or aryl, wherein said groups may be substituted by one, two or more substituents selected from the group consisting of a halogen atom, straight-chain or

branched alkyl or alkoxy having 1 to 4 carbon atoms, and straight-chain or branched haloalkyl having 1 to 5 carbon atoms that has 1 to 11 halogen atoms which may be the same or different.

Claim 13 (Previously presented) The picolinamide compound or salt thereof according to claim 1, wherein R_3 is selected from the group consisting of:

a hydrogen atom, 4-phenoxyphenyl, 4-(4'-t-butylphenoxy)phenyl, 4-(3'-trifluoromethylphenoxy)phenyl, 3-phenoxyphenyl, 2-phenoxyphenyl, 4-benzylphenyl, 4-(4'-methoxyphenoxy)phenyl, 3-trifluoromethyl-4-(4'-trifluoromethylphenoxy)phenyl or 4-(4'-phenylphenoxy)phenyl;

4-(4'-methylphenoxy)phenyl or 4-(4'-methylphenoxy)phenyl;

4-(4'-methylphenoxy)-3-trifluoromethylphenyl, 3-chloro-4-phenoxyphenyl, 4-phenoxy-3-trifluoromethylphenyl, 3-methyl-4-phenoxyphenyl, or 3-methoxy-4-(4'-methylphenoxy)phenyl;

4-(2',4'-di-t-butylphenoxy)phenyl, 4-(3',5'-di-t-butylphenoxy)phenyl, 3-chloro-4-(4'-chlorophenoxy)phenyl, 3-methyl-4-(4'-methoxyphenoxy)phenyl, 1-(1-naphthyl)ethyl, 3-chloro-4-(4'-methoxyphenoxy)phenyl, 3-chloro-4-(4'-methylphenoxy)phenyl, 3-methyl-4-(4'-methylphenoxy)phenyl, 4-(4'-trifluoromethoxyphenoxy)phenyl or 4-(3'-trifluoromethoxyphenoxy)phenyl;

3-methyl-4-(4'-trifluoromethylphenoxy)phenyl, 4-(4'-methylphenoxy)-2-trifluoromethylphenyl, 2,4-di-(4'-methylphenoxy)phenyl, 4-benzyloxyphenyl, 3-benzyloxyphenyl, cyclododecyl, cyclooctyl, 1-adamantyl, 1-adamantanemethyl, 4-cyclohexylphenyl, 3,4-ethylenedioxyphenyl, 4-(4'-nitrophenoxy)phenyl, 2,6-dimethyl-4-phenoxyphenyl, 4-(4'-N-isopropylaminophenoxy)phenyl, 4-(4'-isobutyrylpiperazin-1'-yl)phenyl, 2-methylcyclohexyl, cyclopropyl, cyclopentyl, cyclobutyl, 4-(2'-phenoxyethyloxy)phenyl, 4-(3'-phenoxypropyloxy)phenyl, 4-(3'-phenylpropyloxy)phenyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, phenyl, 4-methylphenyl, 4-chlorophenyl, 4-fluorophenyl, 4-t-butylphenyl, 4-neopentylphenyl, 2-fluoro-4-methylphenyl, 3,4-dichlorophenyl, 3,5-difluorophenyl, 3,5-di-t-butylphenyl, 4-trifluoromethylphenyl, 4-trifluoromethoxyphenyl, 2-phenylcyclopropyl, cyclohexyl, 1-cyclohexenyl, 4-phenetyloxyphenyl, 3-chloro-4-phenetyloxyphenyl, 4-(4'-chlorophenetyloxy)phenyl, 4-methylcyclohexyl, cycloheptyl,

cyclooctyl, 3-methyl-4-(3'-trifluoromethylphenoxy)phenyl, 4-t-butyl-2-chlorophenyl, 4-t-butyl-2,6-dimethylphenyl, 5-t-butylisoxazol-3-yl, or 4-t-butylthiazol-2-yl;

4-phenylthiophenyl, 2-methoxy-4-phenoxyphenyl, 3-(3-pyridyl)phenyl, 4-phenylaminophenyl or 4-(4-morpholinyl)phenyl; and

1-benzylpiperidin-4-yl, 4-(4'-aminophenoxy)phenyl, 4-benzoylphenyl, 1-indanyl, 1,2,3,4-tetrahydronaphtho-1-yl, 1-homopiperidinyl, 2-hydroxycyclohexyl or 4-hydroxycyclohexyl.

Claim 14 (Cancelled)

Claim 15 (Cancel)

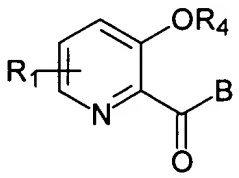
Claim 16 (Previously presented) A method for treating plant pathogenic fungi infectious diseases, comprising the step of applying the picolinamide compound or salt thereof according to claim 1 to agricultural and gardening plants.

Claim 17 (Cancel)

Claim 18 (Cancel)

Claim 19 (Cancel)

Claim 20 (Withdrawn) A picolinic acid derivative represented by formula (2) or a salt thereof:



(2)

wherein

B represents hydroxyl, a halogen atom or alkoxy;

R_1 represents one, two or more groups, which may be the same or different, selected from the group consisting of alkoxy having 1 to 4 carbon atoms and haloalkoxy having 1 to 4 carbon atoms; and

R_4 represents a hydrogen atom, benzyl, alkyl having 1 to 4 carbon atoms or alkanoyl having 1 to 4 carbon atoms, in which the groups other than the hydrogen atom may be substituted,

excluding the case where R_1 represents 4-methoxy with R_4 representing hydrogen or benzyl.

Claim 21 (Withdrawn) The picolinic acid derivative or salt thereof according to claim 19, wherein B is selected from the group consisting of hydroxyl, a chlorine atom, a bromine atom, methoxy, ethoxy, methoxymethoxy, benzyloxy and 4-methoxybenzyloxy.

Claim 22 (Withdrawn) The picolinic acid derivative or salt thereof according to claim 19 or 20, wherein R_1 represents methoxy, ethoxy, 1-propyloxy, isopropoxy, 1-butyloxy, 2-butyloxy, t-butyloxy, trifluoromethoxy, difluoromethoxy, fluoromethoxy, difluorochloromethoxy or trifluoroethoxy.

Claim 23 (Withdrawn) The picolinic acid derivative or salt thereof according to any one of claims 19 to 21, wherein R_4 represents a hydrogen atom, benzyl, p-nitrobenzyl, p-methoxybenzyl, methoxymethyl, methoxyethoxymethyl or diphenylmethyl.

Claim 24 (Withdrawn) A process for producing the picolinic acid derivative represented by formula (2) or salt thereof, comprising the steps of:

oxidizing a substituted 2-hydroxymethylpyridine in an inert solvent to form a 2-carboxyl compound; and

optionally removing the protective group by catalytic hydrogenation or hydrolysis.

Claim 25 (Withdrawn) A process for producing the picolinic acid derivative represented by formula (2) or salt thereof wherein R_1 represents alkoxy having 1 to 4 carbon atoms or haloalkoxy having 1 to 4 carbon atoms substituted at the 6-position, said process comprising the steps of:

optionally introducing a protective group into 3-hydroxypicolinic acid to convert 3-hydroxypicolinic acid to an N-oxide compound;

successively subjecting the N-oxide compound to acylation and rearrangement to introduce acyloxy into the 6-positoin; and

optionally removing the protective group.

Claim 26 (Withdrawn) A process for producing the picolinic acid derivative represented by formula (2) or salt thereof wherein R_1 represents alkoxy having 1 to 4 carbon atoms or haloalkoxy having 1 to 4 carbon atoms which may be the same or different and are substituted at the 4- and 5-positions or 4- and 6-positions, said process comprising the steps of:

optionally introducing a protective group into 3,4-disubstituted picolinic acid to convert 3,4-disubstituted picolinic acid to an N-oxide compound;

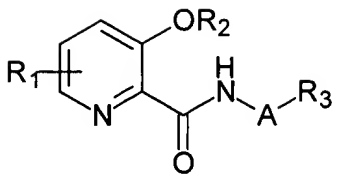
successively subjecting the N-oxide compound to acylation and rearrangement to introduce acyloxy into the 6- or 5-positoin; and

optionally removing the protective group.

Claim 27 (Cancelled)

Claim 28 (Cancelled)

Claim 29 (Currently amended) A process for producing a picolinamide compound represented by formula (1) or a salt thereof,



(1)

wherein

A represents a bond or an optionally substituted alkylene chain;

R_1 represents one or more groups, which may be the same or different, selected from the group consisting of a hydrogen atom, alkoxy, and haloalkoxy;

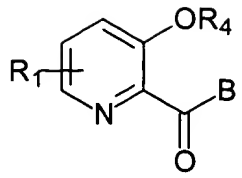
R_2 represents a hydrogen atom, benzyl, alkyl or alkanoyl, in which the groups other than the hydrogen atom may be substituted; and

R_3 represents a hydrogen atom, cycloalkyl, cycloalkenyl, aryl or a heterocyclic group selected from the group consisting of furyl, benzofuranyl, pyrrolyl, indolyl, thienyl, benzothienyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, pyridyl, quinolinyl, pyrimidinyl, pyridazinyl, pyrazinyl, oxiranyl, tetrahydrofuryl, perhydropyranyl, pyrrolidinyl, piperidnyl, homopiperidinyl and morpholinyl, in which the groups other than the hydrogen atom may be substituted,

excluding the case where R_1 represents a hydrogen atom, A represents a bond or a methylene chain, and R_3 represents phenyl or cyclohexyl, and the case where A represents an alkylene chain and R_3 represents a hydrogen atom,

which process comprises:

reacting a picolinic acid compound represented by formula (2) or a salt thereof



(2)

wherein

B represents hydroxyl, a halogen atom or alkoxy;

R_1 represents one, two or more groups, which may be the same or different, selected from the group consisting of alkoxy having 1 to 4 carbon atoms and haloalkoxy having 1 to 4 carbon atoms; and

R_4 represents a hydrogen atom, benzyl, alkyl having 1 to 4 carbon atoms or alkanoyl having 1 to 4 carbon atoms, in which the groups other than the hydrogen atom may be substituted,

excluding the case where R_1 represents 4-methoxy with R_4 representing hydrogen or benzyl,

with H_2N-A-R_3, ~~wherein A and R_3 are as defined above in connection with formula (1),~~ wherein A represents a bond or an optionally substituted alkylene chain, and R_3 represents a hydrogen atom, cycloalkyl, cycloalkenyl, aryl, or a heterocyclic group selected from the group consisting of furyl, benzofuranyl, pyrrolyl, indolyl, thienyl, benzothienyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, oxadiazolyl, thiadiazolyl, pyridyl, quinolinyl, pyrimidinyl, pyridazinyl, pyrazinyl, oxiranyl, tetrahydrofuryl, perhydropyranyl, pyrrolidinyl, piperidnyl, homopiperidinyl and morpholinyl, in which the groups other than the hydrogen atom may be substituted, in an inert solvent in the presence of a condensation agent or an acid linking agent, or under aminolysis reaction conditions; and

acylating the resultant reaction product.

Claim 30 (Previously presented) The process according to claim 29, wherein B is selected from the group consisting of hydroxyl, a chlorine atom, a bromine atom, methoxy, ethoxy, methoxymethoxy, benzyloxy and 4-methoxybenzyloxy.

Claim 31 (Previously presented) The process according to claim 29, wherein R_1 represents methoxy, ethoxy, 1-propyloxy, isopropoxy, 1-butyloxy, 2-butyloxy, t-butyloxy, trifluoromethoxy, difluoromethoxy, fluoromethoxy, difluorochloromethoxy or trifluoroethoxy.

Claim 32 (Previously presented) The process according to claim 29, wherein R_4 represents a hydrogen atom, benzyl, p-nitrobenzyl, p-methoxybenzyl, methoxymethyl, methoxyethoxymethyl or diphenylmethyl.

Claim 33 (New) A process for controlling deuteromyces, ascomycotina, or basidiomycetes on a plant, comprising the step of applying the picolinamide compound or salt thereof according to claim 1 to the plant.

Claim 34 (New) A process for controlling a plant disease selected from a group consisting of rice blast, cucumber anthracnose, powdery mildew of cucumber and wheat leaf rust, comprising the step of applying the picolinamide compound or salt thereof according to claim 1 to a plant.

Claim 35 (New) A composition comprising an anti-fungal amount of the compound according to claim 1 and a carrier or adjuvant.